



Course Descriptor
VTMD415 Veterinary Clinical Pathology

Proposed Academic Year	2021 - 22	Last Reviewed Academic Year	
Course Code	VTMD415	Course Title	Veterinary Clinical Pathology
Credit hours	2	Level of study	Undergraduate
College / Centre	CAHS	Department	VTMD
Co-requisites		Pre-requisites	VTMD311

1. COURSE OUTLINE

The course includes topics on hematologic, biochemical and cytologic tests in health and disease of animals. Selection of appropriate diagnostic tests for various diseases, with their specificity, sensitivity, and interpretation, diseases of the respiratory, genitourinary, nervous and endocrine systems of domestic animals.

2. AIMS

This course aims to provide students with a good understanding of the pathological changes that occur in tissues and organ systems and how such changes provide the basis for clinically manifested diseases. The students are expected to relate morphology at macroscopic and microscopic levels to clinically recognizable functional defects and disease states. Students are expected to apply the veterinary techniques learned in biology, veterinary anatomy and physiology.

3. LEARNING OUTCOMES, TEACHING, LEARNING and ASSESSMENT METHODS

Learning Outcomes (Definitive)	Teaching and Learning methods (Indicative)	Assessment (Indicative)
Upon successful completion of this course, students will be able to:		
1. Describe the spectrum and mechanisms of pathological changes in tissues at macroscopic, microscopic and molecular levels.	Power point presentations, lab work, discussion	Work sheets and written examinations
2. Explain the specific pathogenesis and diseases of body organ systems in the veterinary species	Power point presentations, lab work, discussion	Work sheets and written examinations
3. Explain the role of clinical pathology in relation to diagnosis, prognosis, case monitoring and the use of the in-house practice laboratory.	Power point presentations, lab work, discussion	Work sheets and written examinations



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4. Describe characterization, diagnosis, and treatment of diseases of the urinary system of domestic animals.	Power point presentations, lab work, discussion	Work sheets and written examinations
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4. ASSESSMENT WEIGHTING

Assessment	Percentage of final mark (%)
Assignment	20%
Quizzes	20%
Mid-term Examination	20%
Final Examination	40%
TOTAL	100%

5. ACHIEVING A PASS

Students will achieve **2** credit hours for this course by passing **ALL** of the course assessments [*Quizzes, Mid-term, Final Examinations**] and achieving a **minimum overall score of 50%**

NB *Ensure that ALL learning outcomes are taken into account

6. COURSE CONTENT (Indicative)

1 Introductory Concepts	
2 Leukocytes	
3 Erythrocytes	
4 Platelets	
5 Hemostasis	
6 Bone Marrow and Lymph Node	
7 Proteins	
8 Urinary System	
9 Monovalent Electrolytes and Osmolality	
10 Blood Gases, Blood pH, and Strong Ion Difference	
11 Calcium, Phosphorus, Magnesium, and Their Regulatory Hormones	
12 Enzymes	
13 Liver Function and Kidney Function tests.	
14 Glucose, Ketoamines, and Related Regulatory Hormones	
15 Exocrine Pancreas and Intestine	
16 Lipids	
17 Thyroid Function	
18 Adrenocortical Function	
19 Cavitory Effusions	
TOTAL HOURS	30
Plus RECOMMENDED INDEPENDENT STUDY HOURS	15
TOTAL COURSE HOURS	45

7. RECOMMENDED REFERENCES



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Core text/s:

- Steven L. Stockham & Michael A. Scott (Authors): Fundamentals of Veterinary Clinical Pathology 2nd Edition, Blackwell Co. (2008)
- Jackson, Marion L. (editor): Veterinary Clinical Pathology: An Introduction. Wiley –Blackwell. (2007)
- E. H. Coles (Editor): Veterinary Clinical Pathology, 4th Ed., W.B. Saunders Company, USA. Digitized (2008).

Library + online resources:

Open Educational Resources: